

STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF SOLID WASTE MANAGEMENT



USED OIL COLLECTION AND RECYCLING
PROGRAM GUIDE

Revised April 2007

INTRODUCTION

The Used Oil Collection Act of 1993 (TCA 68-211-1001) was enacted by the General Assembly to "reduce the amount of improperly disposed used oil by do-it-yourselfers by providing incentives to increase the number of collection facilities for used oil." The Act establishes a used oil collection fund (\$.02 per quart fee levied at the wholesale level on sales of oil in packaged form) to be used in part to establish used oil collection centers. The Act establishes a toll free telephone number (1-800-287-9013) for use by do-it-yourselfers to obtain information on used oil collection centers and programs. The Act complements the Solid Waste Management Act of 1991 (TCA section 68-211-866 (b)) which requires all counties to provide at least one site to collect used oil and other automotive fluids by January 1, 1995 unless adequate sites are otherwise available for use by the citizens of the county.

The purpose of this guide is to provide used oil collection centers general information concerning several items of importance and good management practices which must be met in order to qualify for grant funding through our program. It is not nor is it intended to be a regulatory manual. Questions concerning regulatory matters should be directed to the Division of Solid Waste Management at (615) 532-0780 or visit www.state.tn.us/environment/swm/. Additional information concerning grants, grant guidelines, or technical matters regarding this program may be found at www.state.tn.us/environment/.

1. Used Oil Collection Centers

A. Definitions:

Tennessee Code Annotated, Section 68-211-1002 (4), (8), and (9), defines do-it-yourselfer (DIY), used oil, and used oil collection centers as follows:

"Do-it-yourselfer" means an individual who removes used oil from the engine of a light duty motor vehicle, small utility engine owned or operated by such individual, non-commercial motor vehicle or farm equipment."

"Used oil" means any oil which has been refined from crude or synthetic oil and, as a result of use, becomes unsuitable for its original purpose due to loss of original properties, or presence of impurities, but which may be suitable for further use and may be economically recyclable. Used oil does not include oil filters.

"Used oil collection center" means a facility, including fixed locations, tanks and containers, which accepts used oil from DIYs and which constitutes an approved centralized collection center for used oil".

Standards for the Management of Used Oil, Chapter 1200-1-11-.11 further defines do-it-yourselfer used oil collection center as follows:

"Do-it-yourselfer used oil collection center" means any site or facility that accepts/aggregates and stores used oil collected only from household do-it-yourselfers.

Since counties are required by the Solid Waste Management Act of 1991 to provide at least one site to collect used oil, the Used Oil Collection Act of 1993 provides for collection center grants to counties, cities, and profit and non-profit organizations to assist with establishing these sites.

B. Provisions for Inclusion in State's Used Oil Collection Database:

The Division of Solid Waste Management has established a toll-free telephone used oil information network. To be included in the database, a representative for each collection site must complete and sign an agreement form (see attachment #1) agreeing to accept used oil from local do-it-yourselfer oil

changers. Upon receipt of the completed form, the site's name and location will be included in the network's database and provided to citizens who call the Division's toll-free number looking for a collection center in their area. The Division will provide a used oil collection center sign to each facility which requests such as required by the Act.

A used oil collection center may be removed from the Division's *hotline* network after;

- a) Three (3) valid complaints from the public against the center owner/operator have been received; or
- b) Being advised by Division of Solid Waste Management personnel or other regulatory agencies of a regulatory violation citation against the facility.

(Note: There may be other reasons deemed as necessary and/or appropriate by the Division of Solid Waste Management for removal of a site from the database. The Division will attempt to notify the operator of the reason(s) for removal.)

If the Division receives a complaint against a center, personnel in the Division of Solid Waste Management will contact the operator to discuss and attempt to resolve the complaint. If a resolution does not result, the center may be removed from the *hotline* database until the Division has been assured that the problem(s) have been or will be corrected. Any further complaints of the same nature can result in automatic removal of the facility from the network without prior notice. Notice of regulatory violations will result in automatic removal of the facility's name from the database without prior notice. Removal of the violation does not ensure reinstatement on the database. If the collection center is removed from the Division's *hotline* network and the site was established using funds obtained through a program grant, the grantee may be required to repay those funds pursuant to the terms and conditions of the grant agreement.

C. Collection/Storage Tanks:

The collection/storage tank or container may include a compartment for the collection and storage of used oil filters. Collection/storage tanks and containers must comply with regulations established under Rule Chapter 1200-1-11-.11 of the rules and regulations of the State of Tennessee. Collection centers must register by completing the Registration for Used Oil Collection Centers form, Schedule A (attached). Underground storage tanks or containers are not recommended and will not be considered for grant funding. If existing underground tanks are used for collection and storage of used oil, the operator should be aware that these tanks are subject to standards for used oil stored underground and all fill pipes must be labeled "USED OIL ONLY."

Collection tanks should receive routine, daily maintenance to remove oil spilled down the outside of tank and remove oil that has collected in spill containment areas or spill pan.

The Division recommends that aboveground collection/storage tanks be used which meet or exceed the following specifications:

1. Double wall containment, 110% containment capacity
2. Lockable, rain-proof lids and access doors
3. Oil level monitoring gauge
4. Corrosion proof, maintenance free exterior shell
5. Built-in deep-well sink with removable debris screen (dual debris screen preferred)
6. Automatic shut-off mechanism to prevent overflow
7. All stainless steel or galvanized exterior hardware

8. Universal, two (2) inch quick disconnect fitting (preferably exterior access) for easy service by oil transporters with a vacuum hose tank truck
9. Movable (empty only) by hoist truck or forklift
10. Vented to prevent the build-up of harmful gases
11. Meets National Fire Protection Association (NFPA) 30 code specifications
12. Aboveground tank exterior must be prominently labeled as "USED OIL ONLY"
13. Manufacturer's comprehensive operations manual supplied with each unit
14. Manufacturer's warranty of at least one (1) year against defects or failure
15. Manufacturer's statement of the recycled material content as well as the recyclable properties of the tank at disposal

The Environmental Protection Agency has primacy for Spill Prevention Control and Countermeasures (SPCC) as specified in the Oil Pollution Prevention regulations (40 CFR Part 112). This part establishes procedures, methods and equipment, and other requirements for equipment to prevent the discharge of oil from non-transportation-related onshore and offshore facilities into or upon the navigable waters of the United States or adjoining shorelines. These regulations are applicable to owners or operators of onshore and offshore facilities engaged in producing, storing, transferring, distributing, and/or consuming oil and oil products. Used Oil collection/aggregation sites having a capacity of more than 1,320 gallons require an SPCC Plan. The new proposed compliance dates are August 17, 2005, to amend an existing SPCC Plan, and February 18, 2006, to implement the Plan. Affected facilities that start operations between August 16, 2002 and February 18, 2006, must prepare and implement an SPCC Plan by February 18, 2006. Affected facilities that become operational after February 18, 2006 must prepare and implement an SPCC Plan before starting operations. More information can be found at <http://www.epa.gov/oilspill/>.

Collection tanks must be covered sufficiently to prevent the spill containment area from filling with rainwater or the spill containment area must be cleaned regularly to eliminate the accumulation of rainwater.

D. Site Preparation and Spill Containment:

The preparation for placement of the collection/storage tank shall include a concrete slab or other similar impermeable and oil resistant material (i.e., asphalt). The pad on which the tank is placed shall also include a berm or other containment device to collect oil in the event of a spill. The volume of the containment area shall be at least 110 percent of the collection tank's volume.

A spill containment area is required if a spill containment tray is not included with the tank. The following guidelines should be used in constructing the spill containment area:

1. The height of the berm should be one (1) foot.
2. The size of the spill containment area in cubic feet may be determined by dividing the total storage capacity of the tank by 7.48 (the number of gallons in a cubic foot.) Multiply this volume by 1.1 to obtain the required size of the containment area. Example: A 300-gallon storage tank should have a spill containment volume of 44 cubic feet.
3. The spill containment berm, constructed on top of the tank pad, may be made from concrete, asphalt, block or cross-ties.

4. Spill containment areas must be lined with a 6 mil polyethylene barrier or sealed with an oil retardant epoxy.
5. If the spill containment area is lined with polyethylene, filler must be used. The filler may be sand, gravel or mulch.
6. If the spill containment area is sealed with an oil retardant epoxy, filler is optional.

Other considerations for site preparation (such as soil conditions, proximity to surface or groundwater in the area, etc.) should be evaluated and determined.

E. Site Operations:

Used oil collection centers meeting the criteria defined in Rule 1200-1-11-.11(4) of the Used Oil Management Standards must be registered with the Division of Solid Waste Management. All collection sites must be in compliance, post their hours of operation, and insure that a responsible employee is present at all times during these hours. The tank(s) must be secured during the off-hours to insure against improper oil disposal or vandalism. The facility should also conspicuously post a sign alerting the public to avoid contamination of the used oil by not mixing any other materials with the used oil brought to the facility. Fire extinguishers capable of fighting petroleum fires should be placed at strategic locations at the site. "No Smoking" signs should be posted. The site should have a communication device capable of alerting the local fire department in the event of a fire or other emergency. Vermiculite or other absorbents should be available to absorb small spills.

Although used oil collection sites may be established at public or private locations, local governments should consider establishing the used oil collection site at convenience center locations. This will eliminate unnecessary additional costs for site preparation and will provide for convenient access by residents at familiar locations. The intent of the law is to have at least one collection site in each county. However, the number of sites will vary. Local governments must also establish their programs consistent with their regional municipal solid waste management plan as required by the Solid Waste Management Act of 1991.

It may be permissible for local governments to contract for used oil and other automotive fluids collection (TCA section 68-211-866(b)). However, there must be a written contract between the parties that identifies the legal responsibilities of each. (The collection facility must be within the boundaries of each county.) A copy of this contract must be on file with the Division of Solid Waste Management.

In the event of a release of used oil to the environment at a used oil collection center, cleanup steps must be performed as stated in T. C. A. 68-211-1018. When a release has occurred, immediately notify the Division of Solid Waste Management and the Division of Water Pollution Control at the Environmental Field Office at 1-888-891-TDEC. On holidays, weekends, and after normal business hours, call Tennessee Emergency Management Association at 1-800-262-3300.

Operators must determine if they will accept used oil filters at their used oil collection centers and choose the option under which they will process used oil filters.

The Division of Solid Waste Management has identified four (4) options that used oil generators may exercise in disposing of used oil filters:

OPTION 1 - RECYCLE THE OIL AND THE METAL FROM THE FILTERS

Used oil filters are exempted from regulation as a hazardous waste if both the metal and the used oil from the filters are recycled. To qualify for the scrap metal recycling exemption, free flowing oil must be removed from the filters through draining and crushing or disassembly of the filter prior to shipping to a metal recycler. Under the used oil recycling exemption, the physical processing of the filters (draining, crushing and/or transporting) is not subject to regulation under the hazardous waste regulations, and may be conducted by the generator or by another party at a different location. If a filter is disassembled, the

remaining material is being granted a statewide special waste approval if the filter element is mechanically compressed to remove all free flowing oil and the oil is collected for recycling. The generator then certifies that the filter element and gaskets are non-hazardous and all free flowing oil has been removed. This certification is being accepted without Toxicity Characteristic Leaching Procedure (TCLP) testing based on published studies that have indicated filters processed in this manner consistently pass the TCLP test.

OPTION 2 -DRAIN AND CRUSH THE FILTERS, RECYCLE THE OIL AND DISPOSE OF THE FILTERS AS A SPECIAL WASTE IN ANY CLASS I LANDFILL

A statewide special waste approval is being granted for all used oil filters which are certified as non-hazardous and which have been properly drained and crushed, eliminating all free flowing oil. This certification is being accepted without TCLP testing based on published studies that have found filters processed in this manner consistently pass the TCLP test. The crushing removes approximately 88% of the oil from the filter, with only about one ounce of oil remaining in the fiber filter element. This eliminates the leakage of oil from the fiber after it has been placed in a landfill. If a filter is properly drained and crushed, then it may be disposed of in any Class I landfill (with or without a synthetic liner) that is permitted in Tennessee. The oil removed during draining and crushing must be collected and properly recycled. Under the used oil recycling exemption, the physical processing of the filters (draining crushing and/or transporting) is not subject to regulation under the hazardous waste regulations and may be conducted by the generator or by another party at a different location.

OPTION 3 - PUNCTURE AND HOT DRAIN OR COLD DRAIN & DISPOSE OF AS SPECIAL WASTE IN A SUBTITLE D LANDFILL (SYNTHETIC LINER)

A statewide special waste approval is being granted for all used oil filters which are certified as non-hazardous and which have been punctured and hot drained for a minimum of twelve (12) hours, or cold drained for twenty-four (24) hours. This certification is being accepted without TCLP testing based on published studies which have found that filters processed in this manner consistently pass the TCLP test. Hot draining is defined as when the filter and oil is removed/drained at engine operating temperature. Cold draining is defined as when the draining begins at a temperature when the oil and filter is at less than engine temperature. At least one hole must be punctured in the dome end of the filter and the dome end pointed downward while being drained. Filters should be double bagged in 3 mm plastic bags (garbage) and tied at the loose end prior to disposal. The oil removed during draining must be collected and properly recycled. Under the used oil recycling exemption, the physical processing of the filters (puncturing, draining and/or transporting) is not subject to regulation under the hazardous waste regulations. This option does require that the filters be crushed as long as they are properly drained and disposed of in a permitted Class I Landfill with a full Subtitle D Synthetic Liner and Leachate Collection System. Terne plated filters are not exempt under this approval and continue to be treated as hazardous waste.

OPTION 4 - DISPOSE OF THE FILTERS AS A HAZARDOUS WASTE

If a generator chooses not to recycle, crush, or puncture and hot or cold drain then the filters are handled as a hazardous waste. Special waste approval will not be granted for filters that are not punctured and drained or drained and crushed. Any oil, which drains from the filters, must be disposed of as a hazardous waste if it is not recycled.

F. Participant Volume Limits:

To participate in the Used Oil Program and be eligible for grant funds, the collection center must accept used, uncontaminated do-it-yourselfer oil from any do-it-yourselfer in quantities of up to five (5) gallons per day per person. Oil from commercial establishments should not be accepted.

To minimize the risk of an operator receiving contaminated oil, one or more of the following procedures should be implemented:

1. Maintain a log of participants and quantities of used oil received at the facility
2. Request frequent or otherwise suspicious participants to complete a form containing their name, address, auto tag number, and signature
3. Randomly test used oil received from participants. Inexpensive test kits may be purchased for this purpose.

G. Used Oil Transporters:

Used oil collection centers shall transfer used oil only to certified transporters in possession of a valid United States Environment Protection Agency (EPA) identification number issued by the Tennessee Division of Solid Waste Management. (Tennessee registration is required even if the transporter has been issued an EPA identification number from another state.) Used oil collection centers shall maintain records of all volumes of material collected on an annual basis, including the identity of the hauler and the name and location of the recycling facility to which the oil was transported (T.C.A. Section 68-211-1014). A listing of registered Tennessee Used Oil Transporters may be found at www.state.tn.us/environment/swm/.